

District of Columbia Public Service Commission Answers

to

DOE Economic Dispatch Questions

- 1) What are the procedures now used in your region for economic dispatch?

PJM Interconnection operates an economically dispatched wholesale market, complete with a day ahead market to facilitate planning, a real-time market as well as appropriate ancillary markets. A capacity market complements the energy market as well.

Who is performing the dispatch (a utility, an ISO or RTO, or other) and over how large an area (geographic scope, Mw load, MW generation resources, number of retail customers within the dispatch area)?

PJM Interconnection (ISO/RTO) operates a centrally dispatched market. Generating capacity is 167,000 megawatts (MW), serving 51.3 million people in all or parts of 13 mid-Atlantic, mid-western and southern states, as well as the District of Columbia. Peak load served to date is 135,000 MW.

- 2) Is the Act's definition of economic dispatch (see above) appropriate?

The Act's definition is accurate as far as it goes, which may not go far enough. The definition only includes generation and excludes demand side response (DSR) resources. In PJM's experience, DSR can contribute at least 8.6 percent or 11,562 MW of peak demand.

Over what geographic scale or area should economic dispatch be practiced?

It is not clear to the DCPSC what economic/engineering limits exist for economic dispatch. In fact, the current PJM configuration may be near its practical limit.

Besides cost and reliability, are there any other factors or considerations that should be considered in economic dispatch, and why?

Except for congestion issues on the transmission system, none exist in our view (except to consider that DSR can substitute for generation or transmission to a certain extent). When congestion occurs, some generators may have to be dispatched out of economic order in order to provide reliable service to those affected areas.

- 3) How do economic dispatch procedures differ for different classes of generation, including utility owned versus non-utility owned generation?

In the PJM, no differentiation is made between utility and non-utility generation.

Do actual operational practices differ from the formal procedures required under tariff or federal or state rules, or from the economic dispatch definition above?

Not to our knowledge. However, PJM's practice differs from the EPACT 2005 in that it allows for DSR.

If there is a difference, please indicate what the difference is, how often this occurs, and its impacts upon non-utility generation and upon retail electricity users. If you have specific analyses or studies that document your own position, please provide them.

PJM typically uses its DSR in the summer months during peak load times. In addition, PJM has stated that DSR is an underdeveloped resource with great potential.

- 4) What changes in economic dispatch procedures would lead to more non-utility generator dispatch?

See answers to questions 2 & 3 above.

If you think that changes are needed to current economic dispatch procedures in your area to better enable economic dispatch participation by non-utility generators, please explain the changes you recommend.

See answers to question 3 above.

- 5) If economic dispatch causes greater dispatch and use of non-utility generation, what effects might this have –on the grid, on the mix of energy and capacity available to retail customers, to energy prices and costs, to environmental emissions, or other impacts?

Because of PJM's current practice of including non-utility generators in economic dispatch, this issue does not apply.

How would this affect retail customers in particular states or nationwide?

See above.

If you have specific analyses to support your position, please provide them to us.

See PJM operational reports such as Annual Report and Market Monitoring Report among others that are available on PJM's website at <http://www.pjm.com/index.jsp>.

- 6) Could there be any implications for grid reliability-positive or negative- from greater use of economic dispatch?

PJM has been using economic dispatch for many years now with continuous operational excellence.

If so, how should economic dispatch be modified or enhanced to protect reliability?

See above.